# A NEW ILLINOIS VASCULAR PLANT AND OTHER DISTRIBUTIONAL RECORDS FOR WEST-CENTRAL ILLINOIS

R. D. Henry and A. R. Scott Institute for Environmental Management and R. M. Myers Herbarium Western Illinois University, Macomb, Illinois 61455

ABSTRACT: A new Illinois vascular plant, Sporobolus pyramidatus (Lam.) Hitchc. is reported along with 70 other county records for two west-central Illinois counties (Pike and Scott). Notable range extensions in the state are recorded for Corydalis aurea Willd., Eriochloa contracta Hitchc., and Leptochloa attenuata (Nutt.) Steud. Additionally, white color forms of Cirsium discolor (Muhl.) Spreng, Cirsium vulgare (Savi) Tenore and Delphinium tricorne Michx. are noted as well as an early flowering Aster novae-angliae L.

#### INTRODUCTION

The information on the vascular plants of Pike and Scott counties in Illinois reported in this paper was derived from a study entitled "Description of the Biota in the Areas of Proposed Illinois River Bridge Sites for the Central Illinois Expressway (FAP 408)" which was funded by the Illinois Department of Transportation and the Federal Highway Administration of the United States Department of Transportation. The plants were collected during walking surveys of the proposed highway corridors from March through September 1981. Distribution status of the species was determined from the work of Mohlenbrock and Ladd (1978) and Mohlenbrock (1978, 1980, 1981, 1982); nomenclature follows Mohlenbrock (1975). Voucher specimens are deposited in the R. M. Myers Herbarium of Western Illinois University (MWI). The plants were collected by the authors and in this report each plant is annotated as to county, habitat and collection number(s).

This paper reports 71 county records. One of these county records, Sporobolus pyramidatus (Lam.) Hitchc., is a state record and 3 others, Corydalis aurea Willd., Eriochloa contracta Hitchc. and Leptochloa attenuata Steud. are notable state range extensions. White color forms of Cirsium discolor (Muhl.) Spreng., Cirsium vulgare (Savi) Tenore and Delphinium tricorne Michx. as well as some June flowering Aster novae-angliae L. plants are also reported.

# STATE RECORD

Sporobolus pyramidatus (Lam.) Hitchc.: Pike, roadside. 1734, 1758.

This alien plant, which is a native of southwestern United

States, was found in sandy soil along the highway west of Florence. Flowering specimens were collected from the rather large population in June and July, 1981. Steyermark (1963) reported an 1896 collection (and none since) from Jackson County, Missouri which is about 225 miles west of Florence, Illinois. Gleason (1963) reports it as adventive in Yonkers, New York.

# NOTABLE RANGE EXTENSIONS

Corydalis aurea Willd. ssp. aurea: Pike, by railroad near edge of woods. 1862, 1690, 1691, 1764.

This plant was found in gravelly ballast about one mile west of Valley City. There were several small colonies each consisting of a small number of plants which were readily growing, flowering and seeding. According to Bowles, et al. (1981) this is an endangered species in Illinois and this would be the only county with an extant population. Bowles, et al. (1981) record it for only 4 northern counties whereas Mohlenbrock (1981) and Mohlenbrock and Ladd (1978) record it for 7 northern and central counties. Nevertheless, by either distribution, the Pike county location is the southernmost county of its occurrence in Illinois, being a 50 mile southwest extension from Mason county (Mohlenbrock, 1981) and a 150 mile southwest extension from LaSalle county (Bowles, et al., 1981). Although considered a native plant, it is theoretically possible that this population is "adventive" since G. B. Ownbey in his specimen determination letter to us states "C. aurea is frequently transported by means of its seeds in railroad ballast etc,....." Eriochloa contracta Hitchc: Pike, sandy soil by roadside. 1732.

This is the seventh and northernmost county for this plant, being about 70 miles northwest of its nearest location in Montgomery county. The other 6 counties are in the southern one-third of the state (Mohlenbrock and Ladd, 1978 and Shildneck,

et al., 1981).

Leptochloa attenuata (Nutt.) Steud.: Scott, floodplain. 1778.

Presently known from 4 counties at the southern tip of the state (Mohlenbrock and Ladd, 1978), this fifth location extends the range north about 150 miles.

#### ADDITIONAL COUNTY RECORDS

Acorus calamus L.: Pike, wet ground. 1632.

Amaranthus spinosus L.: Scott, dike. 1610.

Amaranthus tamariscinus Nutt.: Scott, floodplain. 1779.

Berberis thunbergii DC.: Pike, wooded slope. 1626, 1745.

Betula nigra L.: Scott, floodplain. 1596.

Bidens comosa (Gray) Wieg.: Scott, floodplain. 1787-1788.

Bidens connata Muhl.: Scott, floodplain. 1785-1786.

Botrychium dissectum Spreng.: Pike, woods. 1746.

Botrychium dissectum Spreng. var. obliquum (Muhl.) Clute: Pike, woods. 1747.

Cardaria draba (L.) Desv.: Pike, roadside. 1631.

Carex conjuncta Boott.: Pike, moist woods. 1661. Cassia marilandica L.: Pike, Prairie opening. 1748.

Circaea quadrisulcata (Maxim.) Franch. & Sav. var. canadensis (L.) Hara.: Pike, damp woods. 1767.

Cirsium pumilum (Nutt.) Spreng.: Pike, hill prairie. 1761. Comandra richardsiana Fern.: Pike, prairie opening. 1660.

Commelina diffusa Burm. f.: Scott, floodplain. 1780, 1782.

Corallorhiza odontorhiza (Willd.) Nutt.: Pike, moist woods. 1753, 1754.

Corallorhiza wisteriana Conrad: Pike, wooded stream bed. 1649. Cyperus filiculmis Vahl. var. macilentus Fern.: Pike, dry blufftop. 1766, 1775.

Cyperus ovularis (Michx.) Torr.: Pike, sandy loess field road. 1700.

Danthonia spicata (L.) Beauv.: Pike, dry blufftop. 1733.

Digitaria ischaemum (Schreb.) Muhl.: Pike, soybean field. 1703. Eragrostis poaeoides Beauv.: Pike, grassy farm road. 1704.

Erigenia bulbosa (Michx.) Nutt.: Pike, moist woods. 1628.

Erysimum repandum L.: Pike, by railroad. 1645.

Festuca obtusa Bieler: Pike, woods. 1664, 1668.

Geum vernum (Raf.) Torr. & Gray: Pike, dry wooded hillside. 1633, 1673.

Helianthus grosseserratus Martens: Scott, roadside. 1605. Hieracium scabrum Michx.: Pike, dry woods. 1707, 1723.

Houstonia minima Beck.: Pike, dry bluff. 1654.

Iris pseudacorus L.: Pike, low wet area. 1687.

Kochia scoparia (L.) Roth .: Pike, stream edge under railroad bridge. 1729.

Laportea canadensis (L.) Wedd.: Pike, moist ground. 1696, 1705, 1749.

Lespedeza striata (Thunb.) Hook, & Arn: Pike, blufftop. 1699, 1708, 1727, 1744.

Ligustrum vulgare L.: Pike, floodplain. 1636.

Lindera benzoin (L.) Blume: Pike, woods by stream. 1694, 1751.

Linum usitatissimum L.: Pike, roadside. 1776.

Liparis lilifolia (L.) Rich.: Pike, wooded bluff. 1762, 1769,

Lonicera maackii Maxim.: Pike, wooded hillside. 1629.

Lonicera prolifera (Kirchn.) Rehd.: Pike, rocky wooded bluff. 1665, 1666.

Lonicera sempervirens L.: Pike, moist woods. 1686.

Monotropa uniflora L.: Pike, open woods. 1721.

Muhlenbergia schreberi J. F. Gmel.: Scott, dike. 1777.

Myosotis virginica (L.) BSP: Pike, field. 1672.

Nasturtium officinale R. Br.: Pike, shallow stream. 1612. Onoclea sensibilis L.: Pike, wet ground. 1678.

Osmorhiza claytonii (Michx.) Clarke: Pike, floodplain. 1638, 1675, 1768.

Paspalum pubiflorum Rupr. var. glabrum (Vasey) Vasey: Scott, dike. 1608.

Phalaris arundinacea L.: Pike, wet ditch. 1674.

Poa sylvestris Gray: Pike, woods. 1698.

Polygonum erectum L.: Pike, farm lane. 1716.

Rorippa sylvestris (L.) Bess.: Pike, floodplain. 1685, 1711.

Scutellaria nervosa Pursh.: Pike, floodplain. 1657, 1695.

Sibara virginica (L.) Rollins: Pike, mudflat. 1623, 1634.

Silene nivea (Nutt.) Otth.: Pike, wooded floodplain. 1774.

Silene stellata (L.) Ait. f.: Pike, woods. 1773.

Smilax illinoensis Mangaly: Pike, rocky wooded hillside. 1663.

Specularia perfoliata (L.) A. DC.: Pike, wooded hillside. 1637,

1651, 1658.

Spiranthes ovalis Lindl.: Pike, open old field. 1720, 1755.

<u>Stachys</u> tenuifolia Willd. var. <u>hispida</u> (Pursh) Fern.: Pike, ditch at base of bluff. 1726, 1742; Scott, floodplain. 1784.

Taenidia integerrima (L.) Drude: Pike, rocky wooded bluff. 1622, 1650.

Thaspium trifoliatum (L.) Gray var. flavum Blake; Pike, moist woods.

Verbesina helianthoides Michx.: Pike, wooded hillside. 1736.

Viola striata Ait.: Pike, floodplain. 1639, 1640.

Zea mays L.: Pike, wooded slope. 1715.

Zizia aurea (L.) Koch.: Pike, moist wooded hillside. 1667.

## COLOR FORMS COLLECTED

<u>Cirsium discolor</u> (Muhl.) Spreng. f. <u>albiflorum</u> (Britt.) House: <u>Pike</u>, roadside. 1743.

Mohlenbrock (1975) p. 439, states that white flowered specimens are rarely observed.

<u>Cirsium vulgare</u> (Savi) Tenore: Pike, cattle feedlot. 1728.

This plant had white flowers.

<u>Delphinium tricorne</u> Michx. f. <u>albiflora</u> Millsp.: Pike, wooded hillside. 1630.

Mohlenbrock (1981) p. 106 states that form <u>albiflora</u> has been found twice in the Pine Hills of Union County and that a large colony of white flowered plants has been seen in Randolph county. This collection extends the range of this form about 120 miles north.

## UNUSUAL FLOWERING TIME

Aster novae-angliae L. characteristically flowers in late summer and fall (August - October per Mohlenbrock (1975, p. 428)). We noticed several plants growing in low ground in Pike county in full flower on June 24 and 25, 1981. We collected numbers 1759 and 1760.

# LITERATURE CITED

- Bowles, M. L., V. E. Diersing, J. E. Ebinger, and H. C. Schultz. 1981. Endangered and threatened species of Illinois. Illinois Department of Conservation, Springfield.
- Gleason, H. A. 1963. Illustrated flora of the northeastern United States and adjacent Canada. Vol. 1. Hafner Publishing Co., Inc., New York.
- Mohlenbrock, R. H. 1975. Guide to the vascular flora of Illinois. Southern Illinois University Press, Carbondale. . 1978. The illustrated flora of Illinois:

flowering plants--hollies to loasas. Southern Illinois University Press, Carbondale.

- . 1980. The illustrated flora of Illinois:
  flowering plants willows to mustards. Southern Illinois
  University Press, Carbondale.
- \_\_\_\_\_. 1981. The illustrated flora of Illinois:

  flowering plants magnolias to pitcher plants. Southern
  Illinois University Press, Carbondale.
- . 1982. The illustrated flora of Illinois:
  flowering plants basswoods to spurges. Southern Illinois
  University Press, Carbondale.
- \_\_\_\_\_\_, and D. M. Ladd. 1978. Distribution of Illinois vascular plants. Southern Illinois University Press, Carbondale.
- Shildneck, P., A. G. Jones, and V. Muhlenbach. 1981. Additions to the vouchered records of Illinois plants and a note on the occurrence of <a href="Rumex cristatus">Rumex cristatus</a> in North America. Phytologia 47(4): 265-290.
- Steyermark, J. A. 1963. Flora of Missouri. The Iowa State University Press, Ames.

NOTE: The contents of this report reflect the views of the authors who are responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the Illinois Department of Transportation or the Federal Government.